

## REMARKS

The application includes claims 1-3 and 10-26 prior to entering this amendment.

The Examiner rejected claims 16-19 and 22-24 under 35 U.S.C. § 102(b) over Watanabe (U.S. Patent 7,034,969). The Examiner rejected claims 1-3 and 12 under 35 U.S.C. § 103(a) over Takashimizu (U.S. Patent 6,040,923), Iizuka (U.S. Patent 6,721,009), Sakakibara (U.S. Patent Application Publication No. 2003/0053157), and Furuoya (U.S. Patent 5,805,294). The Examiner rejected claims 10-11 and 13-14 under 35 U.S.C. § 103(a) over Takashimizu, Iizuka, and Watanabe. The Examiner rejected claim 15 under 35 U.S.C. § 103(a) over Watanabe, Sakakibara, and Furuoya. The Examiner rejected claims 20-21 and 25-26 under 35 U.S.C. § 103(a) over Watanabe and Iizuka.

Claims 1-3 and 10-26 remain in the application after entering this amendment. Applicant does not add new matter and requests reconsideration.

### Claim Rejections - 35 U.S.C. § 102

The Examiner rejected claims 16-19 and 22-24 under 35 U.S.C. § 102(b) over Watanabe. Applicant respectfully traverses the Examiner's rejections.

Claims 16-19 depend from independent claim 15, and therefore they include all of the claim features of the claim 15. In the instant Office Action, the Examiner concedes that Watanabe fails to disclose several of the claim features of independent claim 15. See, final Office Action, pages 12-14. Since the Examiner and Applicant are in substantial agreement that Watanabe alone does not anticipate independent claim 15, then Watanabe alone cannot anticipate claims 16-19 which depend from independent claim 15. Applicant therefore requests the Examiner withdraw the instant § 102 rejection to dependent claims 16-19.

Claim 22 recites:

*a sensing device configured to detect light when at least a portion of a document is scanned, wherein the sensing device is configured to pre-scan one or more portions of a document with a sensing device for determining an effective region of the sensing device that corresponds to the scanned document, and wherein the sensing device includes the effective region and one or more non-document regions, and*

*a shielding device configured to inhibit at least one of the non-document regions of the sensing device from receiving light when scanning the portion of the document, wherein the*

*shielding device prevents an overflow of induced charges in at least one of the non-document regions when scanning another portion of the document.*

Applicant agrees with the Examiner that Watanabe fails to disclose both the recited pre-scan and the recited shielding device. See, final Office Action, pages 12-14, where the Examiner concedes that Watanabe does not disclose the recited pre-scan and the recited shielding device. Since Watanabe does not teach or suggest the above-recited claim features, Applicant requests the Examiner withdraw the instant § 102 rejection to claim 22 and its corresponding dependent claims 23-24.

### **Claim Rejections - 35 U.S.C. § 103**

The Examiner rejected claim 15 under 35 U.S.C. § 103(a) over Watanabe, Sakakibara, and Furuoya. The Examiner rejected claims 20-21 and 25-26 under 35 U.S.C. § 103(a) over Watanabe and Iizuka. Applicant respectfully traverses the Examiner's rejections.

Claim 15 recites *pre-scanning one or more portions of a document with a sensing device to determine an effective region of the sensing device that corresponds to the scanned document.*

Applicant and the Examiner appear to be in substantial agreement that Watanabe and Sakakibara fail to disclose the recited claim features. The Examiner, however, asserts Furuoya discloses the recited pre-scanning.

Furuoya discloses a digital copying machine that can scan and print out an enlarged copy of an original document. The digital copying machine selects the size of the enlarged copy based on a magnification requested by the user and a size of the original document to be scanned. Furuoya can detect the size the original document size by pre-scanning the document and then calculating a distance between the edges of the document from the edges of a scanning window in the digital copying machine. In other words, Furuoya detects its document size, so the digital copying machine can select copy sheets suitable for an enlarged copy of the original document. See, e.g., Furuoya, col. 8, lines 24-35.

The Examiner appears to allege Furuoya's pre-scan of a document discloses the recited pre-scanning. There is no disclosure in Furuoya, however, of the digital copying machine pre-scanning to *determine an effective region of the sensing device that corresponds to the scanned document* as the claim recites. Instead, Furuoya pre-scans the document to determine its size, which in turn is utilized with a user-requested magnification to select a paper size for an enlarged

copy of the document. Put differently, Furuoya's pre-scan to detect a document size is distinctly different than the recited *pre-scanning one or more portions of a document with a sensing device to determine an effective region of the sensing device that corresponds to the scanned document*.

Furthermore, there is no motivation or reason to combine Furuoya's pre-scanning activities with Watanabe or Sakakibara, as both Watanabe and Sakakibara pre-set their respective image sensors. See, e.g., Watanabe, col. 11, lines 49-62, where Watanabe discloses presetting its regions 42-1, 42-2, and 42-3 of the CCD regardless of film size and projection area; see, e.g., Sakakibara, Figure 8 and corresponding portions of the specification, where Sakakibara presets its scanning regions based on the resolution of the scan, for example, Sakakibara includes preset dummy pixels in its CCD line sensor that are adjacent to its preset 7500 effective pixels. In other words, even assuming Furuoya's pre-scanning activities did disclose the recited claim features, which they do not, there is no reason to combine Furuoya's pre-scan with Watanabe's and Sakakibara's pre-set image sensors. Since the combination of Watanabe, Sakakibara, and Furuoya fails to teach or suggest the above recited claim features, nor is there a reason or motivation to combine the references, Applicant respectfully requests that the Examiner remove the instant rejection to claim 15 and its corresponding dependent claims.

Since claim 22 recites claim features that are generally similar to those discussed above in claim 15, claim 22 and its corresponding dependent claims are allowable for at least similar reasons. Applicant therefore respectfully requests that the Examiner withdraw the instant rejection to claim 22, and its corresponding dependent claims.

The Examiner rejected claims 1-3 and 12 under 35 U.S.C. § 103(a) over Takashimizu, Iizuka, Sakakibara, and Furuoya. The Examiner rejected claims 10-11 and 13-14 under 35 U.S.C. § 103(a) over Takashimizu, Iizuka, and Watanabe. Applicant respectfully traverses the Examiner's rejections.

Claim 1 recites *pre-scanning one or more portions of a document with an optical sensing device to determine an effective region of the optical sensing device that corresponds to the scanned document*.

Applicant and the Examiner appear to be in substantial agreement that Takashimizu, Iizuka, and Sakakibara fail to disclose the recited claim features. The Examiner, however, asserts Furuoya discloses the recited pre-scanning.

As discussed above with regard to claim 15, there is no disclosure in Furuoya of the digital copying machine utilizing the pre-scan to *determine an effective region of the sensing device that corresponds to the scanned document* as the claim recites, as Furuoya pre-scans the document to select a paper size for an enlarged copy of the document. Since Furuoya's pre-scan to select a paper size for an enlarged copy is distinctly different than pre-scanning to *determine an effective region of the optical sensing device that corresponds to the scanned document*, Applicant requests the Examiner withdraw the rejection to claim 1 and its corresponding dependent claims.

Claim 1 further recites *fetching the induced charges corresponding to the front region and the effective region for the first portion of the document*.

Applicant agrees with the Examiner that Takashimizu fails to disclose the recited fetching. According to the Examiner, Iizuka discloses the recited claim features, specifically, the Examiner alleges Iizuka left unnecessary portion L1 discloses the recited front region and the necessary portion C1 discloses the recited effective region.

There is no disclosure in Iizuka, however, of *fetching the induced charges corresponding to the front region and the effective region for the first portion of the document*. See, e.g., Iizuka, col. 8, lines 57-61, where Iizuka discharges the unnecessary portion L1 and transfers the necessary portion C1 to an output section 5. Put differently, Iizuka's discharging of the unnecessary portion L1 is distinctly different than transferring the portion to the output section 5, and thus Iizuka fails to teach or suggest *fetching the induced charges corresponding to the front region and the effective region for the first portion of the document*. Since none of the cited references teach or suggest the recited fetching the induced charges corresponding to the front region and the effective region for the first portion of the document, Applicant requests the Examiner to withdraw the instant rejection to claim 1, and its corresponding dependent claims.

Claim 17 recites claim features that are generally similar to those discussed above in claim 1, and therefore claim 17 is allowable for at least similar reasons. Applicant respectfully requests that the Examiner withdraw the instant rejection to claim 17.

Claim 1 further recites *shielding a front region and a post region of the optical sensing device from light when scanning the document and wherein the shielding inhibits an overflow of induced charges in the front region when scanning the second portion of the document.*

In the previous Office Action response, Applicant amended the above recited claim features to recite *shielding a front region and a post region*. In the instant final Office Action, the Examiner appears to have not considered this claim amendment, as the Examiner rejected the claim based on the version of the claim prior to the amendment. Applicant maintains that Sakakibara does not teach or suggest the claim as amended.

Applicant agrees with the Examiner that Takashimizu and Iizuka do not teach or suggest the recited claim features. The Examiner argues that Sakakibara's light shielding portion discloses the recited shielding. There is no disclosure in Sakakibara of *shielding a front region and a post region of the optical sensing device from light when scanning the document*. See, e.g., Sakakibara, paragraph [0060], where Sakakibara shields light from a single region of a CCD located adjacent to a dummy pixel region.

Sakakibara, further, does not teach or suggest shielding that *inhibits an overflow of induced charges in the front region when scanning the second portion of the document*. See, e.g., Sakakibara, Figures 8 and 18; and paragraphs [0092]-[0093], where Sakakibara discloses utilizing the shielding portion to reduce an amount of incident light reaching a selected group of pixels in order to improve filtering of the non-effective pixels, not to stop an overflow as the claim recites. Since the combination of Takashimizu, Iizuka, and Sakakibara fails to disclose the above-recited claim features, Applicant requests that the Examiner withdraw the instant rejection to claim 1 and its corresponding dependent claims.

## CONCLUSION

For the foregoing reasons, Applicant respectfully requests reconsideration and allowance of all pending claims. Applicant encourages the examiner to telephone the undersigned if it appears that an interview would be helpful in advancing the case.

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Respectfully submitted,

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